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File Room

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

SR-6J

DATE: MAR 0 2 1999

SUBJECT: **ACTION MEMORANDUM** - Request for a Non-Time Critical CERCLA Removal Action and Consistency Exemption to the $2 Million and 12 Month Statutory Limit at the Evergreen Manor Site, Winnebago County, Illinois.

FROM: Michael Ribordy Michael Ribordy
Remedial Project Manager

TO: William E. Muno, Director
Superfund Division

THRU: Wendy L. Carney, Chief
Emergency and Enforcement Response Branch

I. PURPOSE

The purpose of this action memorandum is to request and document approval of the proposed non-time critical removal action and to request a Consistency Exemption from the $2 million and 12-month statutory limit described herein for the Evergreen Manor Groundwater Contamination Site, Winnebago County, Illinois ("Evergreen Manor Site" or "Site"). The Site consists of an area of groundwater contamination located beneath residential and commercial areas approximately 1.5 miles northwest of the Village of Roscoe in Winnebago County, Illinois. This action is necessary to abate the immediate threat to public health and the environment from exposure to hazardous substances including volatile organics in a public drinking water supply. The proposed action would provide the affected community with a permanent alternate source of safe drinking water. We estimate that the removal action will require 3 months to design and up to an additional 12 months to complete construction. The proposed removal action is a non-time critical (NTC) removal action.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID#: ILD984836734

A. SITE DESCRIPTION

1. Physical Location

The Evergreen Manor Site is located approximately 1.5 miles northwest of the Village of Roscoe in Winnebago County, Illinois, in the west ½ of Sections 21 and 29, and the East ½ of Sections 20 and 30, Township 46 North, Range 2 East. The geographical coordinates for the site are latitude 42°26'19"N, longitude 89°01'47"W. The Site is currently defined by the areal extent of groundwater contamination in the region. The Site includes approximately 250 homes with an estimated total population of 700 persons. More specifically, the area this removal action is addressing includes properties located in the residential areas of Evergreen Manor subdivision, Hononegah Heights subdivision, and the Olde Farm subdivision (see Attachment I, Figure 1). Hononegah Heights subdivision is located north of Hononegah Road while the other two subdivisions are located south of Hononegah Road.

The area surrounding the residential subdivisions is a mixture of residential, farm land and industry. Hononegah Forest preserve is to the west, Rock River is to the south, Hononegah Country Estates subdivision and some agricultural fields are to the east and agricultural land is to the north. A gravel pit and concrete mixing facility are located approximately one-half (½) mile to the northeast. A few scattered industries and a small industrial park are located about one and one-half (1 ½) miles further to the northeast.

Region 5 prepared an environmental justice analysis for the area surrounding the Evergreen Manor Site. Currently available census information indicates that the site is located within Census Track 003902, Block Group 2, which shows a total population of 3,632 with 3 percent minority and 11 percent low income. According to guidelines developed by the Region 5 Environmental Justice Team, the Evergreen Manor Site would not qualify as an environmental justice Site based upon the percentage of minority and low income persons located in the area (see Attachment II).

The geology of the Roscoe, Illinois area is dominated by a bedrock valley, which was carved through the Galena-Platteville Dolomite exposing the underlying St. Peter Sandstone. The bedrock valley has been filled primarily with sands and gravels as deep as 250 feet. The shallow sand and gravel aquifer is the major source of groundwater in the area and is encountered at depths of 35 feet. Well logs indicate the majority of the residential wells obtain water from the sand and gravel aquifer approximately 50 feet to 80 feet below ground surface. The groundwater flows in a south/southwest direction.

2. Background

The Evergreen Manor Site includes groundwater contamination in the Evergreen Manor subdivision, Hononegah Heights subdivision, and Olde Farm subdivision, which are located approximately 1.5 miles northwest of the Village of Roscoe in Winnebago County, Illinois, as shown in Attachment I, Figure 1. Residential wells in the Site area provide drinking water.

Groundwater contamination has prompted the Illinois Environmental Protection Agency (IEPA), the Illinois Department of Public Health (IDPH), and the United States Environmental Protection Agency (U.S. EPA) to conduct investigations of the Site. Residential well samples from the Evergreen Manor Site area have shown concentrations of 1,1-dichloroethene, cis-1,2-dichloroethene, 1,1-dichloroethane, 1,1,1-trichloroethane, trichloroethene (TCE), tetrachloroethene (PCE), and 1,1,2-trichloroethane. In many residential wells, TCE concentrations and to a lesser extent PCE concentrations, exceeded the maximum contaminant level (MCL - the maximum allowable concentration of a substance in a public drinking water supply) standard of 5 micrograms/liter (ug/l or parts per billion) set forth by the U.S. EPA Office of Water, under the drinking water regulations and health advisories.

According to IDPH personnel, contamination at the Site was initially discovered in November 1990 when a lending institution required a local homeowner to sample the home's water supply. Analysis of the well water revealed elevated levels of volatile organic compounds at concentrations above MCLs.

In 1992, IEPA conducted a CERCLA Screening Site Inspection of the Site. During the course of this Site Inspection, IEPA collected 39 soil gas samples and 4 groundwater samples in the area to the northeast of the identified plume to gain information that might lead to the identification of possible sources of the groundwater contamination. IEPA analyzed the samples for 1,1,1-trichloroethane, TCE, and 1,1-dichloroethene. The data revealed that the plume extends beyond Hononegah Heights Subdivision to the northeast toward Rockton Road.

In 1993, IEPA conducted a CERCLA Expanded Site Inspection for the Evergreen Manor Site. IEPA collected groundwater samples during two separate sampling events, the first being November 9 and 10, 1993, and the second being November 15 and 16, 1993. IEPA collected a total of 49 groundwater samples from 45 private wells in the Site area (4 duplicate samples were collected). Laboratory analysis of the samples collected from the private wells in the plume area revealed the presence of 1,1,1-trichloroethane ranging in concentrations from less than 10 parts per billion (ppb) to 37 ppb, and TCE ranging in concentration from less than 10 ppb to 40 ppb. Other compounds below 10 ppb were acetone, 1,1-dichloroethene, 1,1-dichloroethane, 1,2-dichloroethene, and PCE. All samples collected (excluding 2 background samples) contained one or more of these compounds.

To further define the plume and its source(s), the IEPA installed and sampled a total of 24 ground water monitoring wells in the area between December of 1993 and February of 1995. When the

wells were sampled in March of 1994, TCE was detected above the MCL in 2 of the 20 wells sampled and PCE was detected above the MCL in two other wells. In February of 1995, IEPA sampled all 24 groundwater monitoring wells. TCE was detected above the MCL in three wells, including the original two wells from the 1994 sampling event. PCE was detected above the MCL in four wells, including the original two wells from the 1994 sampling event. The analytical results from the monitoring well samples indicated an area around Rockton Road and State Route 251 as the possible source of contamination and confirmed that the groundwater was flowing to the southwest.

Between December of 1990 and March 1994, IEPA and IDPH sampled the drinking water wells at 267 locations in and around the Evergreen Manor Site. The large majority of these locations were homes within the three previously mentioned subdivisions. These results identified 203 locations at which the drinking water was contaminated, including 108 locations at which the drinking water was contaminated in excess of MCLs.

Since 1990, the IDPH has been collecting a limited number of residential well samples on an annual basis. IDPH has detected both TCE and PCE in concentrations above MCLs. Concentrations of TCE within the plume area have ranged from a high of 90.9 ppb in 1990 to a high of 18 ppb in 1998. Concentrations of PCE within the plume area have ranged from a high of 5.8 ppb in 1991 to a high of 5.3 ppb in 1998.

A preliminary risk assessment has identified the ingestion of TCE, PCE and 1,1-dichloroethene through drinking water from affected private wells as the primary exposure pathway of concern. TCE and PCE concentrations in residential drinking water wells are above MCLs. The continuing usage of water from residential wells poses a threat to public health and the environment.

3. Release or Threatened Release into the Environment of Hazardous Substances, or Contaminants

TCE and PCE have been detected at levels in excess of the MCLs in private drinking water wells in the Site area.

4. NPL Status

The Evergreen Manor Site is not yet listed on the National Priorities List (NPL). On July 28, 1998, U.S. EPA proposed the Site for the NPL. The State of Illinois has indicated support for NPL listing of this Site.

B. Other Actions to Date

U.S. EPA completed an Engineering Evaluation/Cost Analysis (EE/CA) in November 1998. The EE/CA evaluated three options to abate the threat(s) to human health from exposure to contaminated drinking water: 1) construction of a water main extension project to bring potable water from the North Park Public Water District to the individual residences threatened by contaminated water; 2) point-of-entry residential treatment involving the use of carbon filters at the outlet of the well; and 3) point-of-use residential treatment involving the use of carbon filters at the kitchen faucet.

On November 10, 1998, U.S. EPA opened the public comment period for the EE/CA. U.S. EPA held a public meeting in the community on November 17, 1998 and accepted public comments at the public meeting and by mail during the 30 day public comment period. On December 10, 1998, the public comment period ended. U.S. EPA's responses to comments received during the public comment period are in Attachment VI. Almost all of the comments received during the public comment period favored a water main extension project to bring potable water from the North Park Public Water District to the individual residences threatened by contaminated water.

C. State and Local Authorities Role

1. State and Local Action to Date

The IEPA and IDPH have been highly involved with the Evergreen Manor Site since 1990. The State Agencies have conducted numerous investigations and sampling events at the Site. IEPA conducted both a CERCLA Screening Site Inspection and a CERCLA Expanded Site Inspection in 1992 and 1993. To further define the plume and its source(s), the IEPA installed and sampled a total of 24 ground water monitoring wells in an area northeast of the Hononegah Heights Subdivision between December of 1993 and February of 1995. The data indicated that the groundwater contamination extended north east at least as far as Rockton Road and North Second Street and that it was flowing in a southwesterly direction. The area identified as the source of contamination was centered in the vicinity of Rockton Road and State Route 251 and extended in a southwesterly direction ("source area").

In March of 1995, IEPA formed a Site Assessment Team and the IEPA began to research the current and historical uses of all the properties surrounding the area of contamination. The IEPA sent out numerous information requests pursuant to Section 104(e) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. Section 9604(e) (CERCLA). Based on responses received from these information requests, along with title searches, file reviews, and groundwater data, the IEPA identified four potentially responsible parties (PRPs). On September 30, 1996, the IEPA sent out notice letters to the identified PRPs. By February 3, 1997, all four PRPs notified IEPA that they were not responsible for the contamination and therefore declined to conduct any work at the Site.

On September 8, 1997, in a letter to David Ullrich, Governor Edgar proposed including this Site on the NPL. The Site was formally referred to U.S. EPA in early 1998. IEPA continues to support U.S. EPA's efforts at the Site.

2. Potential for Continued State/Local Response

We expect that IEPA, as well as the IDPH, will continue to have a supporting role in any further action at this Site.

III. THREAT TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT

Conditions at the Evergreen Manor Site present a threat to public health or welfare as specified in Section 300.415(b)(2) of the National Contingency Plan (NCP).

(a) Actual or potential contamination of drinking water supplies or sensitive ecosystem.

U.S. EPA and IEPA analytical results indicate that 108 residential wells are contaminated with TCE in excess of the MCL and 4 wells are contaminated with PCE in excess of the MCL. U.S. EPA estimates that a total of 250 residential wells are contaminated or are at risk of future contamination.

(b) The unavailability of other appropriate federal or state response mechanisms to respond to the release.

This factor supports the action proposed by this memorandum at the Evergreen Manor Site because the IEPA does not have the resources to conduct a response action itself and has requested U.S. EPA's assistance. IEPA has fully supported Region 5's efforts to mitigate the threats to public health, welfare, and the environment at the Evergreen Manor Site as a NTC removal action.

IV. ENDANGERMENT DETERMINATION

Given the Site conditions, the nature of the hazardous substances on Site, and the potential exposure pathways to nearby populations described in Section II and III above, actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health and welfare and the environment. The implementation of the response action selected in this Action Memorandum will mitigate the actual or threatened releases of hazardous substances from this Site.

The presence of TCE and PCE in residential well samples, at levels in excess of the MCLs, represents an imminent and substantial endangerment to local residents.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Action

1. Proposed Action Description

The provision of an alternative water supply involves the layout of pipelines from the potable water source to the customer and the connection of the customer to the potable water source. The excavated areas would be backfilled with clean fill and restored to, at a minimum, pre-existing conditions. Specific removal action tasks are as follows:

- Construct a water main extension from the North Park Public Water District to the requesting residences affected by the plume located within the boundaries shown in Figure 2 in Attachment I (requesting residences);
- Disconnect all requesting residences from their existing water supply;
- Connect all requesting residences to the well system;
- Abandon all wells previously used by requesting residences according to IEPA regulations.
- Restore excavated areas to pre-existing conditions.

Uncertainties which may affect implementation of the proposed NTC removal action include: 1) seasonal conditions which may postpone start of construction during severe winter weather; 2) the potential that some affected residents will decide not to accept the municipal hook-up due to well abandonment requirements or for other personal reasons; and 3) potential difficulties in securing access, easements and/or rights of way. These uncertainties may affect the time required to complete construction, the actual number of connections to be made, and the overall project cost.

The response actions described in this memorandum directly address actual releases of hazardous substances, or pollutants, or contaminants at the Site which pose an imminent and substantial endangerment to public health and safety. These response actions do not impose a burden on affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

2. Contribution to Remedial Performance

The proposed NTC removal action will remove or eliminate any long-term threats posed through ingestion, inhalation and direct contact with the hazardous substances found in groundwater at the Site. This action, however, does not treat or remove the contamination in groundwater. U.S. EPA will, at a minimum, conduct a focused Remedial Investigation/Feasibility Study (RI/FS) to determine if it is necessary and feasible to contain and/or treat groundwater. We expect to start the RI/FS in the spring of 1999.

3. Description of Alternative Technologies

The EE/CA evaluated two treatment technologies for removing organic contaminants from drinking water before reaching the tap. The first involved the use of point-of-entry carbon filters and the second involved point-of-use carbon filters at the kitchen tap. Neither option was as reliable in the long-term as the option of connecting to an unaffected alternate water source. Both filter options are temporary remedies and, unless the plume naturally attenuates within a reasonable time frame, we would have to implement a permanent solution eventually. Also, the long-term operation and maintenance costs for the treatment options, after several years of operation, made these options considerably less cost-effective than connecting to a water distribution system.

4. Applicable or Relevant and Appropriate Requirements (ARARs)

We will comply with all Federal and State ARARs to the extent practicable. IEPA has provided U.S. EPA with a list of all State ARARs (see Attachment VII).

5. Project Schedule

We expect the design phase of this NTC removal action to require approximately 12 weeks to complete. We may need an additional 52 weeks to complete all phases of construction once funding becomes available.

6. Post Removal Site Control

Completion of removal activities at the Evergreen Manor Site will eliminate direct contact threats to the public via ingestion and inhalation and any need for post removal Site controls. The North Park Public Water District will operate and maintain the system after U.S. EPA completes construction.

B. Estimated Costs

The cost for this NTC removal action depends upon the number of residents that request the connection to their homes. The current estimate for direct and indirect capital costs for

constructing a water main extension project from the North Park Public Water District is $2,514,850. Attachment IV lists the detailed costs.

VI. CHANGE IN THE SITUATION SHOULD THE ACTION BE DELAYED OR NOT TAKEN

Increased risk to public health and the environment will result if no or delayed action ensues. Delay or non-action will result in the continued exposure of residents to drinking water in excess of MCLs and contamination of local surface water conditions.

VII. REQUEST FOR AN EXEMPTION TO THE $2 MILLION AND 12-MONTH STATUTORY LIMITS:

Section 104(c) of CERCLA, as amended, allows exemptions from the $2 million or 12-month limitations set forth in that section in the following circumstances:

A. Emergency Waiver

(i) where continued response actions are immediately required to prevent, limit, or mitigate an emergency; and

(ii) where there is an immediate risk to public health or welfare or the environment; and

(iii) where such assistance will not otherwise be provided on a timely basis; or

B. Consistency Waiver

where the continued response action is otherwise appropriate and consistent with the remedial action to be taken.

CERCLA Delegation 14-2-A (4/15/94) delegates approval authority for an exemption to the $2 million limitation under subsection (A) of this section, to the Assistant Administrator for Solid Waste and Emergency Response and to Regional Administrators, limited to total costs of $6 million and to the Administrator's Management Accountability System and approved funding levels. CERCLA Delegation 14-2-B (4/15/94) delegates approval authority for an exemption to the $2 million limitation under subsection (B) of this section, to the Assistant Administrator for Solid Waste and Emergency Response and to Regional Administrators, limited to proposed and final NPL sites and to the Administrator's Management Accountability System and approved funding levels. CERCLA Delegation 14-3 (9/13/87) delegates approval authority for an exemption to the 12-month limitation under either subsections (A) or (B) of this section, to the Regional Administrators. Delegation R-14-2-B further delegates approval authority for an exemption to the $2 million and 12-month statutory limitations to the Superfund Division Director.

All of the above listed conditions are satisfied.

A. (i) Continued response actions are immediately required to prevent, limit or mitigate an emergency.

Current data indicates that residents living within the Site boundaries continue to be exposed to groundwater above MCLs. A response action is needed immediately to eliminate the threat to public health from ingestion and inhalation of the contaminated water and water vapor.

(ii) There is an immediate risk to public health or welfare or the environment.

The presence of TCE and PCE, both suspected carcinogens, in amounts over the MCL constitutes an immediate threat. The installation of a permanent alternate water supply will eliminate the threat to public health from ingestion and inhalation of the contaminated water and water vapor.

(iii) Assistance will not otherwise be provided on a timely basis.

The IEPA does not have the funding to undertake the installation of an alternate water supply system at this Site. Assistance from local government is also limited for the same reason.

B. Where the continued response action is otherwise appropriate and consistent with the remedial action to be taken.

Appropriateness: This NTC removal action is necessary and required to eliminate a current and future threat to human health. This NTC removal action will permanently abate the threat to human health posed by the TCE and PCE contaminated groundwater currently found in residential wells in the Evergreen Manor Site. The installation of an alternate water supply and the abandonment of residential wells will provide safe drinking water to the affected community and eliminate the carcinogenic and non-carcinogenic risks associated with the ingestion and inhalation of the contaminated water and water vapor.

Consistency: Continued response actions are otherwise appropriate and consistent with the remedial action to be taken. The connection of approximately 250 homes to the North Park Public Water System will permanently eliminate the groundwater risk to these homes. This proposed removal action is consistent with any anticipated remedial action for the Site.

VIII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues associated with this Site.

IX. ENFORCEMENT

For administrative purposes, information concerning the confidential enforcement strategy for this Site is contained in the Enforcement Confidential Addendum (Attachment III).

X. RECOMMENDATION

This decision document represents the selected NTC removal action for the Evergreen Manor Site, located in Winnebago County, Illinois. This decision document was developed in accordance with CERCLA as amended by SARA and is not inconsistent with the NCP. This decision is based on the Administrative Record for the Site. Attachment V identifies the items that comprise the Administrative Record upon which the selection of the NTC removal action is based.

Conditions at the Evergreen Manor Site meet the NCP § 300.415(b)(2) criteria for a NTC removal action and I recommend your approval of the proposed NTC removal action. In addition, since conditions at the Site meet the CERCLA § 104(c) criterion for an exemption to the statutory limits, I recommend that you approve an exemption to the $2 million statutory limit and 12 month statutory limit for removal actions. The total project cost ceiling, if approved, will be $2,514,850.

You may indicate your decision by signing below:

APPROVE: Wm. E. Muno 3/2/99

William E. Muno, Director
Superfund Division

DISAPPROVE: _____ _____

William E. Muno, Director
Superfund Division

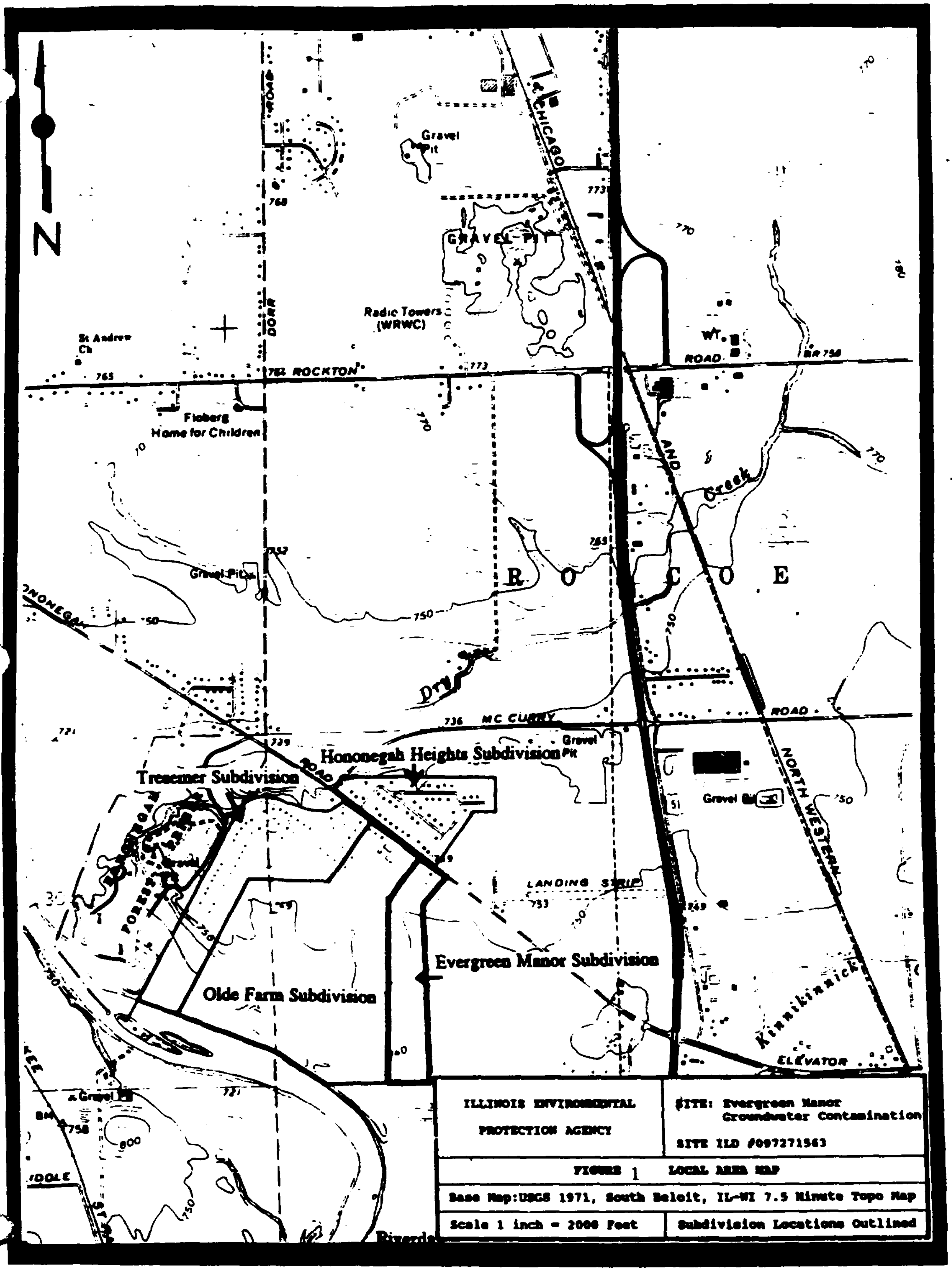
Attachments:

I. Figure 1: Site Location Figure
Figure 2: Residential Homes to be Connected to the North Park Public Water District
II. Environmental Justice Analysis
III. Enforcement Confidential Addendum
IV. Detailed Contractor Cost Estimate
V. Administrative Record Index
VI. Responsiveness Summary
VII. Potential Applicable Relevant and Appropriate Requirements for the State of Illinois.

cc: E. Watkins, U.S. EPA HQ, 5202-G
D. Henne, U.S. Department of Interior, **w/o Enforcement Addendum**
J. Willman, IEPA, **w/o Enforcement Addendum**

ATTACHMENT I

FIGURES


N
Gravel Pit
GRAVEL PIT
Radio Towers (WRWC)
St Andrew Ch
ROCKTON ROAD
Floberg Home for Children
CHICAGO AND NORTH WESTERN
ROCKTON
Gravel Pits
Dry Creek
MC CURRY ROAD
Hononegah Heights Subdivision
Tresemer Subdivision
Olde Farm Subdivision
Evergreen Manor Subdivision
LANDING STRIP
Kinnikinnick Creek
ELEVATOR
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
SITE: Evergreen Manor Groundwater Contamination
SITE ILD #097271563
FIGURE 1 LOCAL AREA MAP
Base Map:USGS 1971, South Beloit, IL-WI 7.5 Minute Topo Map
Scale 1 inch = 2000 Feet
Subdivision Locations Outlined

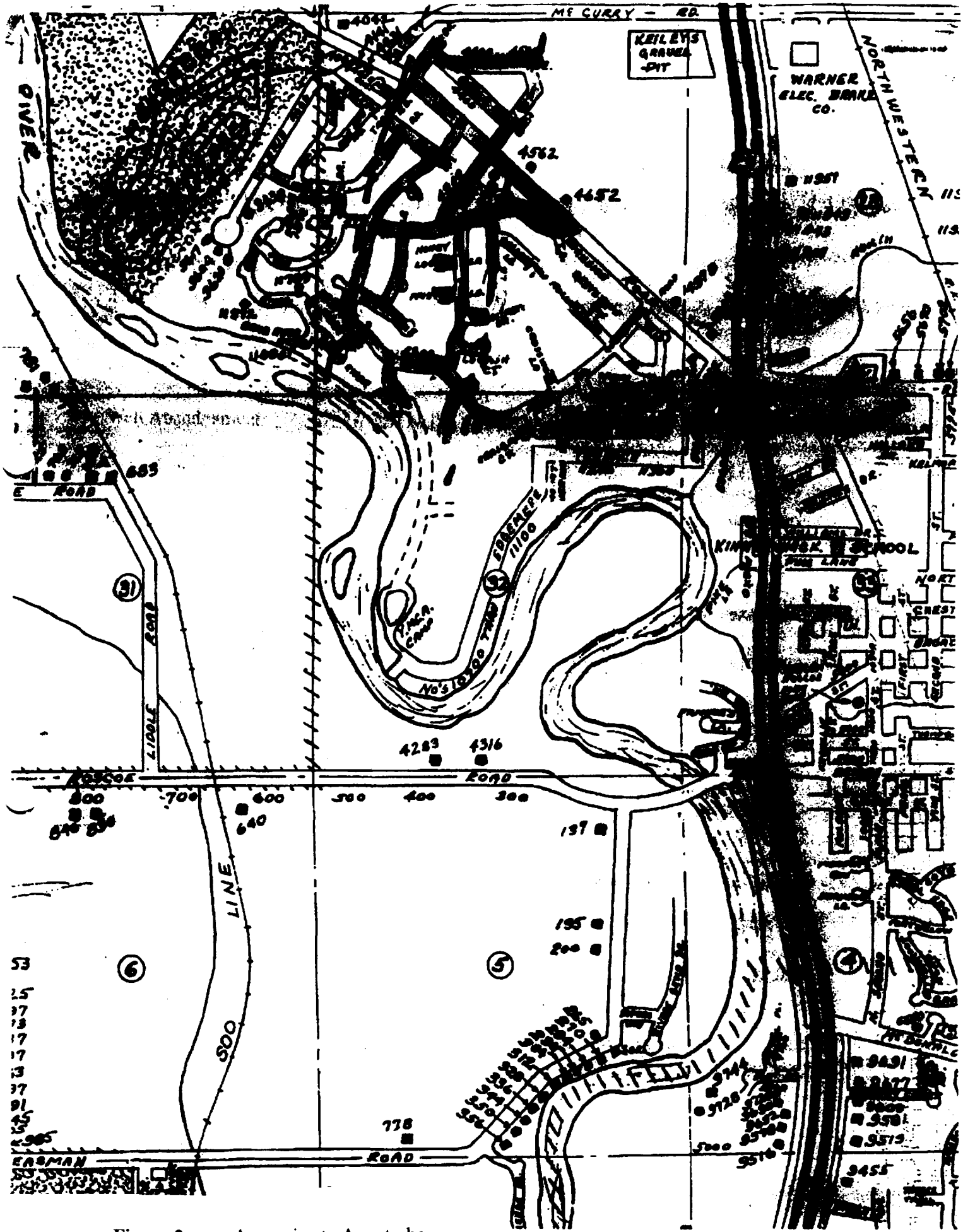


Figure 2 - Approximate Area to be Connected to the North

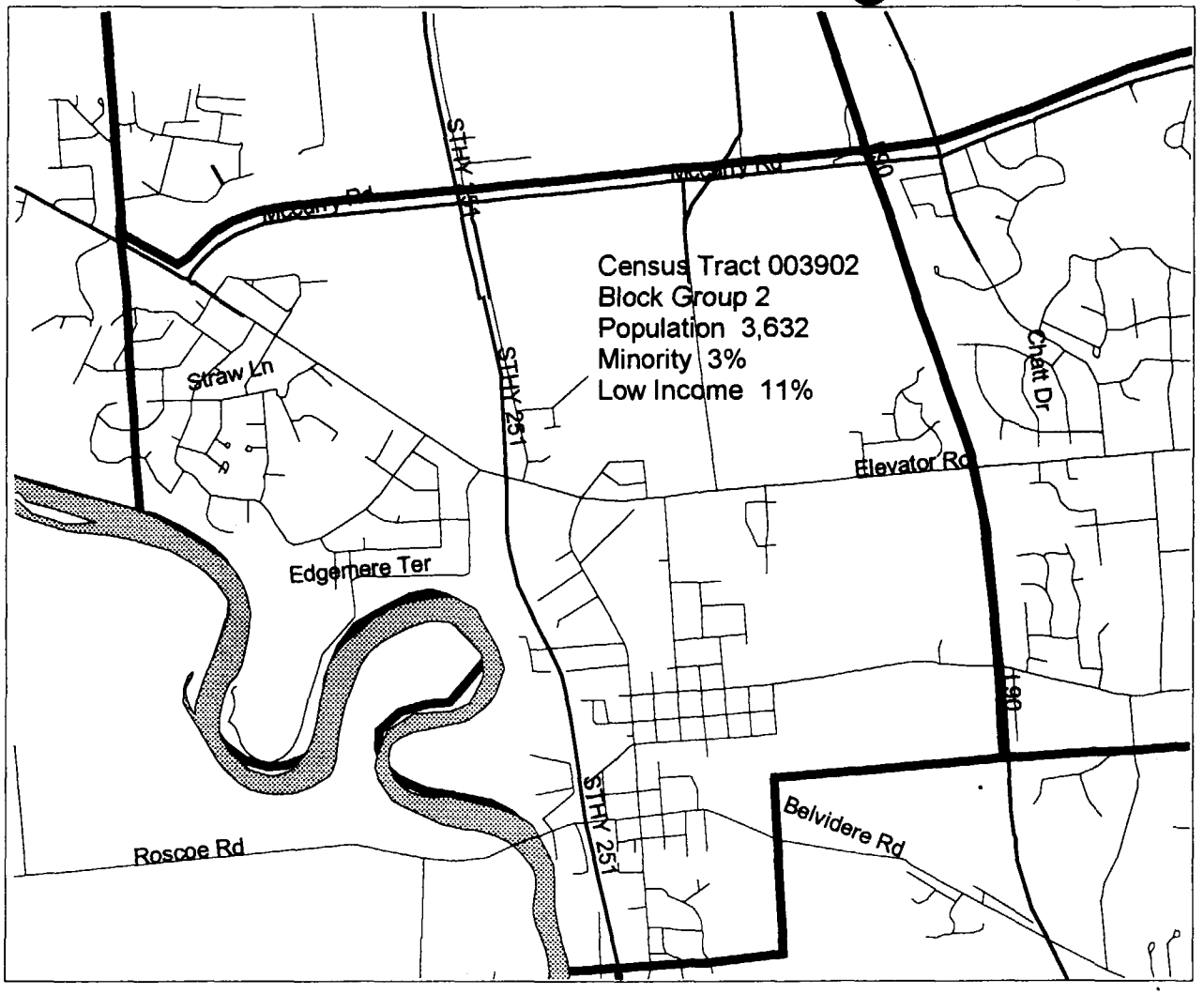
ATTACHMENT II

ENVIRONMENTAL JUSTICE ANALYSIS

Region 5 Superfund EJ Analysis

Evergreen Manor GW Plume Site

Winnebago Co, IL



EJ Identification

- Low Income and Minority Less than State Average
- Low Income or Minority at or Greater than State Average
- Low Income or Minority 2 Times or Greater than State Average (meets Region 5 EJ Case criteria)
- Site Location [except GW Plumes]
- Block Group Boundary

Region 5 EJ Case Criteria for Illinois
Minority: 50% or greater
Low Income: 54% or greater

N

Date of Map:2/17/99

Source of Map: 1990 Census Database

ATTACHMENT III
ENFORCEMENT ADDENDUM

EVERGREEN MANOR SITE
FEBRUARY, 1999
4 PAGES

HAS BEEN REDACTED

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

ATTACHMENT IV

EVERGREEN MANOR
ALTERNATE WATER SUPPLY PROJECT
WINNEBAGO COUNTY, ILLINOIS

U.S. EPA Lead

DESCRIPTION	QUANTITY	UNIT $	TOTAL $
Water main 8" PVC, Hydrants Tees & Misc. Fittings	19,000 ft.	$48.70 per ft	$925,300
Water main 12" PVC, Hydrants Tees & Misc. Fittings	2,600 ft.	$58.00 per ft.	$150,800
1" Water Service to Property line	250 homes	$430 per home	$107,500
Well Abandonment	250 wells	$610 per well	$152,500
Push Hononegah Road	2	$20,000	$ 40,000
Home Connection	250 homes	$1,660	$415,000
Pavement Replacement	8,200 sq.yd.	$24 per sq.	$196,800
Restoration	---	---	$ 64,000
Inspection Fee (North Park Water District & Winnebago County)	250 homes	$25 per home	$ 6,250
Development Fee (North Park Water District)	250 homes/lots	$700 per home/lot	waived
Engineering & Design	---	---	$ 50,000
Inspector Fees	800 hr. (40 hr per wk. X 20 wk.)		

ERRS Contractor G&A Fees	1.43% on Labor	$120,250 x 1.43%	$ 1,700
	5.25% on Materials	$1,987,900 x 5.25%	$104,400
OSC oversight	800 hr. (40 hr. per wk. X 20 wk.)	[redacted]	[redacted]
SUBTOTAL----------			$2,286,250
10% Contingency			$ 228,600
TOTAL PROJECT			**$2,514,850**

The above estimate is based on the following assumptions:

1. The footage are estimates based on a odometer reading
2. The number of homes is a close estimate. Aerial photos indicate 233; however a bunch of the undeveloped lots now have homes on them.
3. The OSC costs are an estimate of both time and travel expenses.
4. Basic route of main, taking into account necessary "looping", basically approved by the North Park Water District.
5. Well abandonment mandated by: IEPA, IDPH and the water district.
6. Fees confirmed by water district.
7. Inspector is full time, on-site.
8. Connection from property line to residence assumes directional bore.
9. Unit prices based on current pricing in the area.
10. Contractor G&A based on Environmental Quality Management, Inc. as the Prime.

ATTACHMENT V

ADMINISTRATIVE RECORD INDEX

AR

ATTACHMENT V

U.S. ENVIRONMENTAL PROTECTION AGENCY

ADMINISTRATIVE RECORD
FOR
EVERGREEN MANOR GROUNDWATER CONTAMINATION SITE
ROSCOE, WINNEBAGO COUNTY, ILLINOIS

ORIGINAL
NOVEMBER 9, 1998

NO.	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1	07/00/92	IEPA	U.S. EPA	*CERCLA Screening Site Inspection Report* for the Evergreen Manor Groundwater Contamination Site	114
2	00/00/94	IEPA	U.S. EPA	*CERCLA Expanded Site Site Inspection Report* for the Evergreen Manor Groundwater Contamination Site	265
3	05/29/97	IEPA	U.S. EPA	Hazard Ranking System Documentation Record for the Evergreen Manor Groundwater Contamination Site	88
4	05/29/97	IEPA	U.S. EPA	Hazard Ranking System Documentation Record: References 1-14 for the Evergreen Manor Groundwater Contamination Site	430
5	05/29/97	IEPA	U.S. EPA	Hazard Ranking System Documentation Record: References 15-32 for the Evergreen Manor Groundwater Contamination Site (DOCUMENT HAS NOT BEEN COPIED FOR PHYSICAL INCLUSION INTO THE ADMINISTRATIVE RECORD: MAY BE VIEWED AT U.S. EPA REGION 5)	
6	11/00/98	U.S. EPA	Public	Fact Sheet: *U.S. EPA Evaluates Removal Options for the Evergreen Manor Groundwater Contamination Site*	10

NO.	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
7	11/10/98	U.S. EPA		*Engineering Evaluation/ Cost Analysis Report* for the Evergreen Manor Groundwater Contamination Site w/ Attachments	98
			UPDATE #1 FEBRUARY 26, 1999		
1	01/00/97	Conestoga-Rovers & Associates	Ecolab, Inc.	Report: Contaminant Source Evaluation for the Evergreen Manor Site (SEE DOCUMENT #2, ATTACHMENT #11)	
2	01/31/97	Christenson, S.; Ecolab, Inc.	Eastep, L., IEPA and A. Hyderi, Office of Illinois Attorney General	Letter re: Ecolab's Response to IEPA's September 30, 1996 Notice Letter and Related Letters from the IAG Concerning the Evergreen Manor Site w/ Attachments #1-11	223
3	09/00/97	Conestoga-Rovers & Associates	Ecolab, Inc.	Groundwater Flow Analysis Report for the Evergreen Manor Site (SEE DOCUMENT #4, ENCLOSURE #2)	
4	09/22/97	Christenson, S.; Ecolab, Inc.	Wallace, E., Office of Illinois Attorney General	Letter re: Ecolab's Response to IAG's April 14, 1997 Letter Concerning the Super-fund Program and the Evergreen Manor Site w/ Attachments	38
5	10/09/98	Christenson, S.; Ecolab, Inc.	U.S. EPA/ CERCLA Docket Office	Letter re: Ecolab's Comments on the Proposed Listing of the Evergreen Manor Site on the National Priorities List	14

NO.	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
6	11/00/98	Concerned Citizens	U.S. EPA	Twenty-Five Public Comment Letters/Sheets Received November 13-December 10, 1998 on U.S. EPA's Proposed Cleanup Plan for the Evergreen Manor Site	25
7	11/17/98	Midwest Professional Reporting	U.S. EPA	Transcript of the November 17, 1998 Public Meeting re: the Evergreen Manor Ground-water Contamination Site	74
8	12/07/98	Christenson, S.; Ecolab, Inc.	Pope, J., U.S. EPA/	Letter re: Ecolab's Comments on the EE/CA for the Evergreen Manor Site	2
9	00/00/00	Ribordy, M., U.S. EPA	Muno, W., U.S. EPA	Action Memorandum: Request for a Non-Time Critical CERCLA Removal Action and Consistency Exemption to the $2 Million and 12 Month Statutory Limit at the Evergreen Manor Site **(PENDING)**	

ATTACHMENT VI

RESPONSIVENESS SUMMARY

This Responsiveness Summary addresses concerns raised by the public and governmental bodies in written and oral comments received by the United States Environmental Protection Agency (U.S. EPA) regarding alternatives evaluated by U.S. EPA to abate the threat to human health from exposure to contaminated drinking water at the Evergreen Manor Site.

U.S. EPA released the final Engineering Evaluation/Cost Analysis (EE/CA) and Fact Sheet for public review on November 10, 1998; a copy of the fact sheet was mailed to area residents. A public comment period opened on November 10, 1998, and closed 30 days later on December 10, 1998. A public availability session and public meeting were held on November 17, 1998, in order to afford concerned citizens an opportunity to ask questions of Agency officials. Officials from U.S. EPA, the Illinois Environmental Protection Agency (IEPA) and the Illinois Department of Public Health (IDPH) were available during these sessions. During the public comment period, U.S. EPA received the following comments concerning the proposed alternatives.

Summary of Significant Comments

Comment 1: The Agency received approximately 23 written comments (out of 26) requesting that the affected residents be connected to the North Park Public Water District. All comments received during the public meeting were in favor of being connected to the North Park Public Water District.

U.S. EPA's Response: U.S. EPA's selected alternative is the water main extension from the North Park Public Water District to the affected residents.

Comment 2: Two residents submitted comments expressing their preference for the point-of-entry filters as the recommended alternative.

U.S. EPA's Response: U.S. EPA evaluated three alternatives in the Engineering Evaluation/Cost Analysis (EE/CA) document based on several criteria. U.S. EPA agrees with these residents that the point-of-entry filters, if properly maintained, can provide adequate protection from all exposure pathways. The primary difference between the point-of-entry alternative and the water main extension alternative involves cost and long-term effectiveness. The point-of-entry filters are initially far less expensive than the North Park Public Water District alternative. However, as the number of years that the filter system must be maintained increases, the cost differential between the two alternatives decreases because the North Park Public Water District option has no long-term costs. U.S. EPA estimates that it will take a number of years before the contaminant levels in the groundwater decrease to levels where filters would no longer be required. Therefore, the cost savings which would be expected from selecting point-of-entry filters becomes less of a factor due to the potential length of time the filter systems would have to be maintained.

The second difference between the two options relates to long-term effectiveness. Filters are generally regarded as a temporary remedy utilized only until a permanent solution can be implemented. Of the three alternatives, only the North Park Public Water District option is considered a permanent remedy. Both filter options require annual operation and maintenance costs to keep the filter systems operating. The maintenance of up to 250 filter systems can become both a logistical and a financial problem which will only increase as the length of time of operation increases. If several filter changes are required during the operation and maintenance of the remedy, filter systems may not be the most cost effective remedy. Therefore, in 2-3 years, if the contaminant levels are still above MCLs, a permanent remedy would have to be selected for the Site. Selection of the point-of-entry filters could potentially result in substantially greater costs if a permanent remedy would eventually have to be implemented.

Finally, based on the comments received by U.S. EPA and opinions expressed at the public meeting, the affected community is strongly in favor of the North Park Public Water District option. The community wants a permanent remedy, a remedy which is protective of human health, and a remedy which will protect property values in the area. U.S. EPA believes the North Park Public Water District is the best option which will meet these goals.

All residents in the effective area will be given the option of being hooked up to the North Park Public Water District. Residents who choose not to be hooked up will be responsible for the maintenance of their own well.

Comment 2: One resident inquired whether soil and water samples were ever taken from the former Klenzade property and from the open pit landfill located at what is now the northwest corner of Illinois Highway 251 and Prairie Hill Road.

U.S. EPA's Response: The former Klenzade property was located at what is now the Ecolab facility. The ponds mentioned in the commenter's letter associated with the Klenzade property have undergone closure under the direction of the State. Soil samples were collected in the vicinity of the ponds and analyzed for metals. No analysis for volatile organic compounds was conducted. The State did collect groundwater samples in the vicinity of the Ecolab property. The analysis indicated that the sample contained tetrachloroethylene (PCE) and 1,1,1 trichloroethane, but no trichloroethene (TCE) was detected.

U.S. EPA does not believe the open pit landfill located at what is now the northwest corner of Illinois Highway 251 and Prairie Hill Road is within the potential source area. Based on the hydrologic data collected to date, U.S. EPA believes that any contamination originating from this area would not reach the Site. If this information changes, U.S. EPA will modify its potentially responsible party (PRP) search area.

Comment 3: The Agency received several comments that the source of the problem should be located and those responsible for the contamination should pay the cost for remediating the site, for site related health problems, and for any economic impact in the area.

U.S. EPA's Response: From the beginning of the Superfund process, U.S. EPA makes every effort to identify the parties responsible for the hazard and to encourage them to respond. If efforts to ensure a responsible party response do not lead to prompt action, EPA may act using Trust Fund monies. U.S. EPA generally uses Trust Fund money to respond if: 1) PRPs have not been identified or are not financially viable; 2) litigation against a PRP is pending; 3) insufficient evidence has been collected linking a PRP to the contamination; or 4) the threat is substantial and imminent enough to warrant immediate action. Whenever Trust Fund money is used, U.S. EPA will attempt to recover costs from PRPs. However, Trust Fund money is not used to address site related health care costs or to address economic impacts in the area.

As described in the EE/CA and Action Memorandum, the State has conducted several investigations to identify the source of the contamination and issued general-notice letters to four PRPs. Future investigations by U.S. EPA could reveal additional information that will further characterize the groundwater plume and/or confirm the identification of the actual cause of contaminated groundwater in the area. As data identifies a source(s) area, U.S. EPA will issue General Notices of Potential Liability and appropriate administrative orders, and will take any other appropriate judicial and administrative action.

Comment 4: One comment requested that the Agency address the underground contamination.

U.S. EPA's Response: Restoration of contaminated ground waters is one of the primary objectives of the Superfund program. U.S. EPA intends to conduct a Remedial Investigation/Feasibility Study (RI/FS) to determine whether any additional action besides the water main extension needs to be conducted at the Site. Upon conclusion of the RI/FS, a Record of Decision will be issued identifying the final remedy for the Site.

Comment 5: The Agency received several comments regarding whether property values have declined because of the groundwater contamination, and if so, what can be done to avoid the loss. Other commenters stated that property values have decreased because of the groundwater contamination.

U.S. EPA's Response: U.S. EPA is not qualified to answer this question. U.S. EPA believes the selected remedy should address any perceived or actual decline in property values.

Comment 6: One comment asked if the North Park Public Water District option is selected, would homes have to be hooked up to sewer at the same time.

U.S. EPA's Response: There is no requirement to be hooked up to sewer in order to be connected to the North Park Public Water District.

Comment 7: The Agency received comments regarding whether homeowners can be reimbursed for money spent on filter systems for their homes. Also, if filters are selected, and a home already has a filter system, would the agency pay for operation and maintenance of the existing filter system.

U.S. EPA's Response: U.S. EPA can not reimburse homeowners for money spent on actions initiated independently by the homeowner. One of the local papers erroneously stated that homeowners can get reimbursed by U.S. EPA. This is not accurate.

If filters were selected, homeowners would be given the option of having a filter system installed and maintained. U.S. EPA and the State would not accept responsibility for maintaining a preexisting filter system.

Comment 8: One comment stated that stronger, stricter controls are needed to prevent companies/corporations from polluting our environment.

U.S. EPA's Response: Reducing waste generation and managing waste safely are relatively new practices in the context of our country's economic and industrial history. For decades, industry disposed of waste either without regard to environmental impacts, or in ways that appeared safe at the time, but were, in fact, environmentally unsound. Beginning in the 1970s, Americans began to take note of the legacy of this past behavior. Well publicized incidents such as the discovery of extensive contamination at Love Canal, New York spurred lawmakers to action. The Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) in 1980. This law, more commonly known as "Superfund," created a program to clean up abandoned hazardous waste sites across the country. To this day, many of the areas Superfund is addressing, including the Evergreen Manor Site, resulted from waste management practices conducted before 1980.

The improper management of hazardous waste is probably one of the most serious environmental problems in the United States. In 1979, U.S. EPA estimated that only 10 percent of all hazardous waste was managed in an environmentally sound manner. Mismanagement has potentially severe consequences: groundwater - the source of drinking water for about half the nation's population - is polluted from the open dumping of wastes or from improperly operated landfills and surface impoundments. Groundwater pollution is not the only problem posed by improper hazardous waste management. The improper disposal of hazardous waste has polluted streams, rivers, lakes, and other surface waters, killing aquatic life, destroying wildlife, and stripping areas of vegetation.

The Resource Conservation and Recovery Act (RCRA), an amendment to the Solid Waste Disposal Act, was enacted in 1976 to address the problem of how to safely dispose of the huge volumes of municipal and industrial waste generated nationwide. RCRA was significantly amended through the Hazardous and Solid Waste Amendments (HSWA) in 1984. The Subtitle C program developed under RCRA is designed to ensure that the mismanagement of hazardous waste does not continue. It does this by creating a Federal "cradle-to-grave" system to manage hazardous waste. RCRA also assures proper closure and clean up of environmental releases by owners and operators of waste storage, treatment, and disposal facilities, thereby preventing future Superfund sites.

In addition to RCRA and CERCLA, the Agency now administers eight other comprehensive environmental protection laws: The Clean Air Act (CAA); the Clean Water Act (CWA); the Safe Drinking Water Act (SDWA); the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); the Toxic Substances Control Act (TSCA); the Marine Protection, Research, and Sanctuaries Act (MPRSA); Uranium Mill Tailings Radiation Control Act (UMTRCA); and the Pollution Prevention Act (PPA).

U.S. EPA implements the Federal laws designed to promote public health by protecting our Nation's air, water, and soil from harmful pollution. U.S. EPA endeavors to accomplish its mission systematically by proper integration of a variety of research, monitoring, standard-setting, and enforcement activities.

Environmental enforcement is a comprehensive program involving federal, state, local, and tribal governments working together to enforce federal environmental laws. These laws set standards for what individuals and institutions must do to control or prevent pollution. Without enforcement, environmental laws would be just words on paper. The term "enforcement" covers all efforts to encourage compliance with environmental laws. "Compliance" refers to the condition that exists when a person or company fully obeys the law. An environmental law without compliance would mean that pollution problems would continue and grow worse. U.S. EPA has an enforcement program to make sure that laws get the results that Congress and the public want.

The fundamental aim of enforcement is to convince those who are regulated that it is better to comply quickly than to wait until they are caught. We use enforcement actions to compel a person or company to comply. These actions include civil and criminal prosecution in courts, administrative orders, and other forms of action that take place after a violation has occurred. Although directed at a specific violator, enforcement causes a deterrent effect that motivates other people to comply. U.S. EPA believes that adequate controls are currently in place to minimize the likelihood that companies/corporations will pollute the environment.

Comment 9: One comment stated the EE/CA should focus on trichloroethylene (TCE) as the primary contaminant of concern at the proposed site. In other words, any removal action should focus on addressing potential concerns associated with TCE.

U.S. EPA's Response: The objective of this removal action is to provide potable water to the affected residents at the Site. CERCLA requires that actions selected to remedy hazardous waste sites be protective of human health and the environment. Currently, the Evergreen Manor Site has both TCE and PCE above Maximum Contaminant Levels (MCLs). MCLs are set based on known or anticipated adverse human health effects, the ability of various technologies to remove the contaminant, their effectiveness, and cost of treatment. All MCLs are set at levels that protect public health. Therefore, at a minimum, the selected remedy would have to address both TCE and PCE contamination. In addition, U.S. EPA conducted a preliminary risk assessment based on information from groundwater data of residential wells at the Site. This assessment identified TCE, PCE, and 1,1-dichloroethene as contaminants, which on their own, may pose a health risk.

Comment 10: One comment stated that the proposed Site definition used in the EE/CA should be limited to the Evergreen Manor residential areas in Section 29, Township 46 North, Range 2 East where TCE has been detected above MCLs or above Observable Release Criteria.

U.S. EPA's Response: According to the National Contingency Plan (NCP), the term "on-site" means the geographical (or, as the NCP calls it, the "areal") extent of the contamination and all suitable areas in very close proximity to the contamination that are necessary for implementation of the response action. Using this definition, U.S. EPA includes both the surface area and the air above the site, as well as the hydrogeologic contamination beneath the surface, including the groundwater plume.

The EE/CA accurately defined the Site by the areal extent of groundwater contamination in the region. The investigations conducted at the Site have identified a plume of contaminated groundwater extending from an area on Rockton Road just east of Highway 251, to Olde Farm, Evergreen Manor, and the Hononegah Heights subdivisions. Data exists showing groundwater contamination levels above MCLs throughout the plume area. Therefore, limiting the definition of the Site to the Evergreen Manor residential areas in Section 29, Township 46 North, Range 2 East would not accurately define the Site.

Comment 11: One comment stated that the Site should not be listed on the National Priorities List (NPL). The commenter further states that the EE/CA suggests that U.S. EPA may perform a Remedial Investigation/Feasibility Study (RI/FS) at a later date, presumably, if the Site is listed as final on the NPL. Because the EE/CA concludes that any of the removal actions proposed in the EE/CA would effectively mitigate the risks to public health, there is no reason to list the site on the NPL or to expend resources on the RI/FS.

U.S. EPA's Response: The first part of this comment relates to the proposed listing of the Site on the NPL. The purpose of this responsiveness summary is not to comment on the proposed listing, but rather to respond to comments on the EE/CA. Comments on the proposed listing of the Site on the NPL should have been submitted during the public comment period associated with the Site's proposed listing which ended in September 1998.

The second part of the comment relates to whether an RI/FS is necessary once the removal action is implemented. Although the selected removal action will mitigate the risks to public health, it will not address the groundwater contamination problem. As previously stated in response to Comment 4, restoration of contaminated ground waters is one of the primary objectives of the Superfund program. The NCP, which provides the regulatory framework for the Superfund program, states that:

> "EPA expects to return useable groundwaters to their beneficial uses wherever practicable, within a time frame that is reasonable given the particular circumstances of the site" (NCP § 300.430(a)(1)(iii)(F)).

Generally, restoration cleanup levels in the Superfund program are established by applicable or relevant and appropriate requirements (ARARs), such as the use of Federal or State standards for drinking water quality.

Most of the data collected to date has focused on defining the number of residential wells impacted by the groundwater contamination. Some limited studies have been conducted to locate the source of the contamination. An RI/FS is needed to collect the information necessary for evaluating groundwater restoration options. An RI/FS can be conducted without the Site being listed on the NPL.

Comment 12: A commenter requested that their comments and the enclosures with the comments be included in the Administrative Record for the Site.

U.S. EPA's Response: U.S. EPA, as a matter of policy, incorporates all comments, attachments, appendices, and other accompanying documents received during the public comment period into the Administrative Record subsequent to signing the Action Memo.

ATTACHMENT VII

ILLINOIS EPA ARARS

Potential ARARs for Evergreen Manor Groundwater Contamination Site

Citation	Title or Description of ARAR
Public Water Supplies:	
35 IAC[1] Part 601 and 602	Introduction and Permits
35 IAC Part 611	Primary Drinking Water Standards
35 IAC Part 620	Groundwater Quality Standards
35 IAC Part 651 and 652	Introduction and Permits
35 IAC Part 653	Design, Operation, and Maintenance Criteria
35 IAC Part 654	Raw and Finished Water Quality and Quantity
35 IAC 212 (40 CFR 51)	Visible and Particulate Matter Emissions
35 IAC 902	Sound Emission Standards and Limitations For Motor Vehicles
77 IAC 920	Illinois Water Well Construction Code-Well Abandonment
40 CFR[2] 141	Safe Drinking Water Act- National Primary Drinking Water Stds.
40 CFR 6	Consideration of Wetlands and Flood Plains in Actions
16 U.S.C. 1531, 50 CFR 402	Endangered Species Act and promulgated regulations

NOTES
1. Illinois Administrative Code
2. Code of Federal Regulations